



2631  
15W

PTO/SB/21 (09-04)  
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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/654,643	
	Filing Date	09/05/2000	
	First Named Inventor	Pak Shing Chau	
	Art Unit	2631	
	Examiner Name	Bayard, Emmanuel	
Total Number of Pages in This Submission	10	Attorney Docket Number	RA-194(RA194.P.US)

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment/Reply  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input type="checkbox"/> Information Disclosure Statement   <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application  <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s) _____  <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input type="checkbox"/> Other Enclosure(s) (please identify below): 1. Statement under 37 CFR 3.73(b) 2. Copy of filed and recorded assignment papers (7 pgs.) 3. Return Receipt Postcard
<input type="text"/> Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Silicon Edge Law Group, LLP - Arthur J. Behiel, Patent Attorney		
Signature			
Printed name	Arthur J. Behiel		
Date	2/13/2006	Reg. No.	39,603

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:	
Signature	
Typed or printed name	Laurie Moreno
Date	2/13/06

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/02 (01-06)  
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**REVOCATION OF POWER OF  
ATTORNEY WITH  
NEW POWER OF ATTORNEY  
AND  
CHANGE OF CORRESPONDENCE ADDRESS**

Application Number	09/654,643
Filing Date	09/05/2000
First Named Inventor	Pak Shing Chau
Art Unit	2631
Examiner Name	Bayard, Emmanuel
Attorney Docket Number	RA-194(RA194.P.US)

**I hereby revoke all previous powers of attorney given in the above-identified application.**

☐ A Power of Attorney is submitted herewith.

**OR**

☒ I hereby appoint the practitioners associated with the Customer Number: 38,489

☒ Please change the correspondence address for the above-identified application to:

☒ The address associated with  
Customer Number:

38,489

**OR**

☐ Firm or  
Individual Name

Address

City

State

Zip

Country

Telephone

Email

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/06)

**SIGNATURE of Applicant or Assignee of Record**

Signature

Name

Date

Telephone

*Kent R. Richardson*  
**KENT R. RICHARDSON, VICE PRESIDENT INTELLECTUAL PROPERTY**  
**2/9/06** **650-947-5000**

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Rambus Inc.Application No./Patent No.: 09/654,643 Filed/Issue Date: 09/05/2000Entitled: Low-Latency Equalization in Multi-Level, Multi-Line communication SystemRambus Inc., a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 011389, Frame 0755, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature

2/13/2006

Date

Arthur J. Behiel

Printed or Typed Name

925-621-2113

Telephone Number

Attorney for Applicant

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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MARCH 14, 2001

PTAS



\*101574269A\*

MARK LAUER  
7041 KOLL CENTER PARKWAY  
SUITE 280  
PLEASANTON, CA 94566

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/15/2000

REEL/FRAME: 011389/0755  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CHAU, PAK SHING

DOC DATE: 11/14/2000

ASSIGNOR:

LIAW, HAY-JYH

DOC DATE: 11/30/2000

ASSIGNOR:

KIM, JUN

DOC DATE: 11/30/2000

ASSIGNOR:

ZERBE, JARED L.

DOC DATE: 11/15/2000

ASSIGNEE:

RAMBUS INC.  
2465 LATHAM STREET  
MOUNTAIN VIEW, CALIFORNIA 94040

SERIAL NUMBER: 09654643

FILING DATE: 09/05/2000

PATENT NUMBER:

ISSUE DATE:

011389/0755 PAGE 2

SHAREILL COLES, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

OIPF

01-08-2001

Attorney Docket No.: RA-194

FORM PTO-1595

RECORD



ET

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

101574269

To the Assistant Commissioner for Patents: Please record the attached original document or copy thereof:

## 1. Name of conveying party(ies):

Pak Shing Chau,  
Haw-Jyh Liaw,  
Jun Kim,  
Jared L. Zerbe.

12-15-00

## 2. Name and address of receiving party:

Name: Rambus Inc.

Street Address: 2465 Latham Street

City: Mountain View

State: CA ZIP: 94040

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Dates: 11/14/2000 - 11/30/2000

Additional name(s) & addresses attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s): 09/654,643

B. Patent No.(s)

C. Patent Application Entitled: "Low-Latency  
Equalization in Multi-Level, Multi-Line  
Communication Systems"Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom  
correspondence concerning document should be  
mailed:Mark Lauer  
7041 Koll Center Parkway, Suite 280  
Pleasanton, CA 94566

## 6. Total number of applications and patents involved: 1

7. Total Fee (37 CFR 3.41) \$ 40.00

- ☒ Enclosed  
☐ Authorized to be charged to deposit account

8. Deposit account number:  
(attach duplicate copy of this page if paying by deposit account)

## 9. Statement and signature.

*To the best of my knowledge and belief, the forgoing information is true and correct and any attached copy is a true copy of the original document.*

01/ 1/2001 BTUN11 00000037 09654843

01 02561

40.00 DP

Mark Lauer

Name of Person Signing

Signature

12/12/00

Date

Total number of pages including cover sheet, attachments, and document: 2

Mail documents to be recorded with required cover sheet information to:

Assistant Commissioner for Patents, Box Assignments

Washington, D.C. 20231

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Box Assignment, Assistant Commissioner for Patents, Washington D.C., 20231, on December 12, 2000.

Mark Lauer

Date

## ASSIGNMENT OF PATENT APPLICATION

WHEREAS, we, Pak Shing Chau; Haw-Jyh Liaw; Jun Kin; and Jared L. Zerbe (hereinafter referred to as ASSIGNORS); having post office addresses of: 1677 Klipspringer Drive, San Jose, CA 9512; 40939 Camero Place, Fremont, CA 94539; 6 Knot Lane, Redwood City, CA 94065; and 431 Hillside Drive, Woodside, CA 94062; respectively, are the joint inventors of an invention entitled "LOW-LATENCY EQUALIZATION IN MULTI-LEVEL, MULTI-LINE COMMUNICATION SYSTEMS," filed September 5, 2000, as U.S. Patent Application Serial Number 09/654,643;

WHEREAS, Rambus Inc. (hereafter referred to as ASSIGNEE), a corporation of the State of Delaware having a place of business at 2465 Latham Street, Mountain View, CA 94040, is desirous of acquiring the entire right, title, and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign, and transfer unto said ASSIGNEE, the entire right, title, and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues, and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty, or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors an assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer, and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protection title to said invention or letters patent therefor.

IN WITNESS WHEREOF, We have hereunto signed our names on the day and year set forth below.

  
\_\_\_\_\_  
Inventor's Signature

Pak Shing Chau  
Inventor's Printed Name

Nov 14, 2000  
Date

STATE OF California )  
COUNTY OF Santa Clara ) SS  
)

On this 14<sup>th</sup> day of November, 2000, before me personally came the above named Pak Shing Chau, who is personally known by me or proved to me on the basis of satisfactory evidence to be the same individual who executed the foregoing assignment, and who acknowledged to me that he/she executed the same of his/her own free will for the use and purposes therein set forth.



NOTARY PUBLIC Michiko Sites  
My Commission Expires: Oct. 8, 2003

Haw-Jyh Liaw  
Inventor's Signature

Haw-Jyh Liaw  
Inventor's Printed Name

11/30/00  
DATE

STATE OF California )  
COUNTY OF Santa Clara ) SS  
)

On this 30th day of November, 2000, before me personally came the above named Haw-Jyh Liaw, who is personally known by me or proved to me on the basis of satisfactory evidence to be the same individual who executed the foregoing assignment, and who acknowledged to me that he/she executed the same of his/her own free will for the use and purposes therein set forth.



NOTARY PUBLIC Michiko Sites  
My Commission Expires: Oct. 8, 2003



Jun Kim  
Inventor's Signature

Jun Kim  
Inventor's Printed Name

11-30-00  
DATE

STATE OF California  
COUNTY OF Santa Clara

)  
) SS  
)

On this 30<sup>th</sup> day of November, 2000, before me personally came the above named Jun Kim, who is personally known by me or proved to me on the basis of satisfactory evidence to be the same individual who executed the foregoing assignment, and who acknowledged to me that he/she executed the same of his/her own free will for the use and purposes therein set forth.



NOTARY PUBLIC Michiko Sites  
My Commission Expires: Oct. 8, 2003

Jared L. Zerbe  
Inventor's Signature

Jared L. Zerbe  
Inventor's Printed Name

11/15/00  
DATE

STATE OF California )  
COUNTY OF Santa Clara ) SS  
)

On this 15<sup>th</sup> day of November, 2000, before me personally came the above named Jared L. Zerbe, who is personally known by me or proved to me on the basis of satisfactory evidence to be the same individual who executed the foregoing assignment, and who acknowledged to me that he/she executed the same of his/her own free will for the use and purposes therein set forth.



NOTARY PUBLIC Michiko Sites  
My Commission Expires: Oct. 8, 2003